Complete Summary

GUIDELINE TITLE

Membranous nephropathy: role of cyclosporine therapy.

BIBLIOGRAPHIC SOURCE(S)

Thomas M. Membranous nephropathy: role of cyclosporine therapy. Nephrology 2006 Apr;11(S1):S166-9.

Thomas M. Membranous nephropathy: role of cyclosporine therapy. Westmead NSW (Australia): CARI - Caring for Australians with Renal Impairment; 2005 Sep. 8 p. [8 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

- Chronic kidney disease
- Idiopathic membranous glomerulonephritis

GUIDELINE CATEGORY

Management
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Nephrology
Pediatrics

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To evaluate the available clinical evidence pertaining to the impact of cyclosporine on renal functional decline in membranous glomerulonephritis with poor prognostic features, such as heavy proteinuria (> 3 g/24 h), impaired renal function at presentation, deteriorating renal function and/or reduced response to therapy

TARGET POPULATION

Adults and children with idiopathic membranous glomerulonephritis

INTERVENTIONS AND PRACTICES CONSIDERED

Cyclosporine therapy (alone or in combination with a corticosteroid)

MAJOR OUTCOMES CONSIDERED

- Membranous glomerulonephritis remission
- Relapse rate
- Proteinuria
- Renal failure progression

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Databases searched: Medical Subject Heading (MeSH) terms and text words for Membranous Nephropathy were combined with MeSH terms and text words for cyclosporine therapy. This search was carried out in Medline (1966 to September Week 1 2004). The Cochrane Renal Group Trials Register was also searched for trials in membranous nephropathy not indexed in Medline.

Date of searches: 9 September 2004.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Level I: Evidence obtained from a systematic review of all relevant randomized controlled trials (RCTs)

Level II: Evidence obtained from at least one properly designed RCT

Level III: Evidence obtained from well-designed pseudo-randomized controlled trials (alternate allocation or some other method); comparative studies with concurrent controls and allocation not randomized, cohort studies, case-control studies, interrupted time series with a control group; comparative studies with historical control, two or more single arm studies, interrupted time series without a parallel control group

Level IV: Evidence obtained from case series, either post-test or pretest/post-test

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Recommendations of Others. Recommendations regarding the role of cyclosporine therapy in membranous nephropathy from the following groups were discussed: Kidney Disease Outcomes Quality Initiative, UK Renal Association, Canadian Society of Nephrology, European Best Practice Guidelines, and International Guidelines.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Guidelines

a. The use of cyclosporine therapy alone to prevent progressive renal injury in idiopathic membranous glomerulonephritis (MGN) is not supported by current data. (Level I evidence)
b. Cyclosporine therapy in combination with steroids may be more effective than steroids alone for the induction of remission in patients with idiopathic MGN. (Level II evidence, One RCT)

Suggestions for Clinical Care

(Suggestions are based on Level III and IV evidence)

What dose should be used?

- Most studies using cyclosporin have used a dose of 4–6 mg/kg/day in divided doses, aimed at achieving a trough level of 150 ng/mL.

How long should therapy be continued?

- The antiproteinuric response of cyclosporine is typically seen within 2 to 4 weeks, if therapy is going to be effective. (Level III evidence) Generally, if no response is seen in a patient with adequate drug levels by 3 months, therapy can be considered ineffective and discontinued.
- If remission is induced, most studies have continued treatment for at least 12 months, although the optimal duration of therapy remains to be established.
- In general, within 2 years of discontinuing cyclosporine, a relapse rate between 30 and 40% is observed. This may be responsive to reintroduction of the cyclosporine treatment or a cytotoxic/corticosteroid.

- It has been suggested that more prolonged therapy or long-term lower dose maintenance may be considered for patients who achieve a partial remission with cyclosporine, who are at high risk of relapse or progressive renal impairment. (Level IV, anecdotal reports). However, this practice remains to be tested in any clinical studies.

Definitions:

Levels of Evidence

Level I: Evidence obtained from a systematic review of all relevant randomized controlled trials (RCTs)

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Level III: Evidence obtained from well-designed pseudo-randomized controlled trials (alternate allocation or some other method); comparative studies with concurrent controls and allocation not randomized, cohort studies, case-control studies, interrupted time series with a control group; comparative studies with historical control, two or more single arm studies, interrupted time series without a parallel control group

Level IV: Evidence obtained from case series, either post-test or pretest/post-test

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Appropriate use of cyclosporine therapy in patients with idiopathic membranous glomerulonephritis (MGN)
- Induction of remission in patients with idiopathic MGN with cyclosporine therapy in combination with steroids

POTENTIAL HARMS

Side effects of treatment

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006 Apr

GUIDELINE DEVELOPER(S)

Caring for Australasians with Renal Impairment - Disease Specific Society

SOURCE(S) OF FUNDING

Industry-sponsored funding administered through Kidney Health Australia

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Author: Merlin Thomas

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

All guideline writers are required to fill out a declaration of conflict of interest.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Caring for Australasians with Renal Impairment Web site.

Print copies: Available from Caring for Australasians with Renal Impairment, Locked Bag 4001, Centre for Kidney Research, Westmead NSW, Australia 2145

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- The CARI guidelines. A guide for writers. Caring for Australasians with Renal Impairment. 2006 May. 6 p.

Electronic copies: Available from the Caring for Australasians with Renal Impairment (CARI) Web site.

PATIENT RESOURCES

None available

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Date Modified: 5/25/2009